

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An acetabular implant, comprising:

a screw cup configured to receive an articular insert; screwing means at a periphery or in a tropical/equatorial zone of the cup, said screwing means are intended to be introduced into bone material of the acetabulum during a screwing action, said screwing means comprising screw reliefs, each screw relief having a polar face, an equatorial face and a crest; and

a coating carried by the cup, said coating facilitating osteointegration, ~~or a selective calcium hydroxyapatite coating,~~

wherein the coating is thick on convex portions of an outer surface of the cup, including on thread bottoms of said screwing means and the coating has a lesser thickness, ~~or is even absent,~~ on screw reliefs of said screwing means, the thin coating covering both the equatorial and polar faces and the crests of the screwing means.

2. (previously presented) The implant according to claim 1, wherein a thickness of the thick coating is from 100 to 200 micrometres.

3. (previously presented) The implant according to claim 2, wherein the thickness of the thick coating is of an order of  $150 \pm 35$  micrometres.

4. (previously presented) The implant according to claim 1, wherein the screw reliefs have a coating of an order of  $50 \pm 30$  micrometres.

5. (currently amended) The implant according to claim 1, wherein the screw reliefs ~~(11)~~ do not have any coating and have a rough surface.

6. (previously presented) The implant according to claim 1, wherein the screwing means is arranged to have thread bottoms between sides of threads to facilitate osteointegration, the screw reliefs being arranged to apply a self-tapping cutting effect during the screwing action and effect compression of the bone material.

7. (previously presented) The implant according to claim 6, wherein in a thread pitch, a proportion of thread width,

in a region of the thread bottom, relative to the pitch, is from 0.2 to 0.5.

8. (previously presented) The implant according to claim 1, wherein a cross-section of the threads is asymmetrical in a diametral plane, with a smaller angle of an order of from 5 to 10° at a polar side of the thread, and a greater angle of an order of from 15 to 20° at an equatorial side, in order to bring about a good compression effect when the bone which receives the threading is placed under stress.

9. (previously presented) The implant according to claim 1, wherein crests of threads are relieved, with a leading edge which is radially higher than a remainder of the crest, whose radial height decreases towards a rear of the thread.

10. (previously presented) The implant according to claim 9, wherein the leading edge is itself inclined, by being formed by a milling pass which is strongly inclined in a biased manner relative to an inclination of the threading itself, the leading edge being orientated aggressively forwards relative to the radial.

11. (previously presented) The implant according to claim 1, wherein a threading pitch is regular in order to bring

about a single bone groove, in which successive threads are introduced during the screwing action.

12. (previously presented) The implant according to claim 1, wherein the screwing means has a threading formed by zones of threads which are separated by inclined grooves defining cutting edges.

13. (previously presented) The implant according to claim 1, wherein the screwing means has a spherical threading of constant pitch.

14-17. (cancelled)

18. (currently amended) An acetabular implant, comprising:

a screw cup configured to receive an articular insert;  
threads at a tropical/equatorial zone of the cup, said threads being intended to be introduced into bone material of the acetabulum during a screwing action, said threads comprising each a polar face, an equatorial face and a crest; and

a coating carried by the cup, said coating facilitating osteointegration, ~~or a selective calcium hydroxyapatite coating,~~  
wherein the coating is thick on convex portions of an outer surface of the cup, including on thread bottoms of said

threads, and the coating has a lesser thickness, ~~or is even absent,~~ on screw reliefs of the threads, the thin coating covering both the equatorial and polar faces and the crests of the threads.

19. (previously presented) The implant according to claim 1, wherein the coating is a selective calcium hydroxyapatite coating.

20. (previously presented) The implant according to claim 18, wherein a thickness of the thick coating is from 100 to 200 micrometres.

21. (previously presented) The implant according to claim 20, wherein the thickness of the thick coating is of an order of  $150 \pm 35$  micrometres.

22. (previously presented) The implant according to claim 18, wherein the screw reliefs have a coating of an order of  $50 \pm 30$  micrometres.

23. (previously presented) The implant according to claim 18, wherein the screw reliefs do not have any coating and have a rough surface.

24. (previously presented) The implant according to claim 18, wherein the threads are arranged to have thread bottoms between sides of the threads to facilitate osteointegration, the screw reliefs being arranged to apply a self-tapping cutting effect during the screwing action and effect compression of the bone material.

25. (new) The implant according to claim 1, wherein the coating facilitating osteointegration is a selective hydroxyapatite coating.

26. (new) The implant according to claim 18, wherein the coating facilitating osteointegration is a selective hydroxyapatite coating.